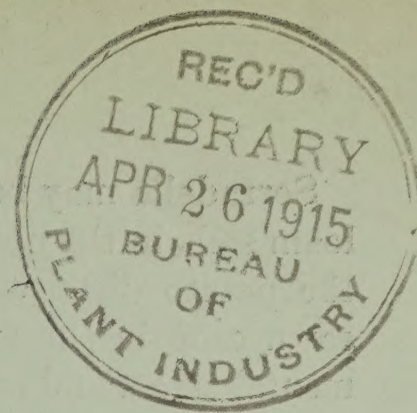


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F. C. I.—17.

United States Department of Agriculture,

BUREAU OF PLANT INDUSTRY,

Forage-Crop Investigations,

WASHINGTON, D. C.

SERRADELLA (*Ornithopus sativus*).

Serradella is a much-branched, slender-stemmed annual legume with pinnate leaves, rose-colored flowers, and pods which break into joints and constitute the commercial seed. Since its introduction into this country from Europe it has been given a trial at most of the State experiment stations as a forage crop. So far it has proved of little value, except in Massachusetts and along the Pacific coast. At the Massachusetts Agricultural Experiment Station satisfactory yields of green forage were obtained from seedlings made early in May in cultivated rows 3 feet apart. It is quite possible that lack of inoculation is the principal cause of the failures.

Serradella is primarily adapted to moist, sandy soils and a cool climate. In Germany, favorable results have been obtained upon heavy loams as well as on the sandy soils. It makes its best growth on soils deficient in lime, in this respect being quite different from such crops as red clover and alfalfa. In Europe serradella is sown broadcast in early spring, either on fall-sown rye or with spring-seeded oats, at the rate of 40 to 60 pounds of seed to the acre. The young plants grow very slowly until they start to bloom. From that time on they grow rapidly and two cuttings may usually be obtained before frost. The first cutting is made when the plants have nearly ceased blooming, and the second in the fall, shortly before frost. Considerable care must be used in curing the hay, as the leaflets fall off easily.

It is necessary to provide inoculation for serradella in order to secure a stand. Soil from well-inoculated serradella plants is not usually available in this country, but pure cultures of the inoculating germs may be obtained free of charge from the United States Department of Agriculture.

The seed is practically all produced in Europe, where it is harvested from the second crop, the yields ranging from 350 to 1,200 pounds to the acre.

Serradella may be found to be useful for spring seeding on sandy-loam soils in the northernmost States, especially in short rotations in the potato districts of Maine and Canada, and perhaps as a fall-sown crop in the extreme South. Serradella is still in the experimental stage, and any one making a trial with it should seed it under a variety of conditions and at different dates in order to determine which is best for his particular conditions.

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